

WHAT IS CLAIMED IS:

- 1 1. A method comprising:
2 automatically identifying an attribute of a first image;
3 automatically selecting a new value, for a product attribute of an image-based product
4 incorporating at least a portion of the first image, based on the image attribute; and
5 receiving an order for the image-based product.
- 1 2. The method of claim 1, further comprising:
2 generating a first preview image of the image-based product.
- 1 3. The method of claim 2, further comprising:
2 displaying the first preview image of the image-based product.
- 1 4. The method of claim 3, wherein displaying the first preview image of the image-
2 based product includes:
3 downloading the first preview image to a client computer; and
4 displaying the first preview image on the client computer.
- 1 5. The method of claim 1, further comprising receiving the first image.
- 1 6. The method of claim 5, wherein receiving the first image includes uploading the first
2 image.
- 1 7. The method of claim 6, wherein the first image is uploaded from a client computer to
2 a server.
- 1 8. The method of claim 7, wherein the first image is uploaded using a computer
2 network.
- 1 9. The method of claim 8, wherein the computer network includes the Internet.
- 1 10. The method of claim 5, wherein receiving the first image includes storing the first
2 image.
- 1 11. The method of claim 10, wherein the first image is stored in an image database.

- 1 12. The method of claim 5, wherein a plurality of images are received.
- 1 13. The method of claim 12, further comprising receiving a selection of the first image
2 from the plurality of images.
- 1 14. The method of claim 13, further comprising displaying the plurality of images.
- 1 15. The method of claim 1, wherein automatically identifying the image attribute includes
2 analyzing the first image.
- 1 16. The method of claim 15, wherein the new value for the product attribute is
2 automatically selected based on the analysis of the first image.
- 1 17. The method of claim 16, wherein analyzing the first image includes generating a set
2 of representative colors from the first image.
- 1 18. The method of claim 17, wherein generating the set of representative colors includes
2 generating a color map for the first image.
- 1 19. The method of claim 18, wherein generating the color map includes performing a
2 median cut algorithm on the first image.
- 1 20. The method of claim 16, wherein automatically selecting the new value for the
2 product attribute includes selecting a color as a function of at least one of the representative
3 colors.
- 1 21. The method of claim 20, wherein selecting the color as a function of at least one of
2 the representative colors includes selecting a color that matches at least one of the
3 representative colors.
- 1 22. The method of claim 21, wherein selecting the color that matches at least one of the
2 representative colors includes selecting a color that complements at least one of the
3 representative colors.
- 1 23. The method of claim 21, wherein selecting the color as a function of at least one of
2 the representative colors includes selecting the color from the set of representative colors.

1 24. The method of claim 23, wherein selecting the color from the set of representative
2 colors includes selecting the most popular color.

1 25. The method of claim 23, wherein selecting the color from the set of representative
2 colors includes selecting the color at random from the set of representative colors.

1 26. The method of claim 20, wherein the product attribute is a border color product
2 attribute of the image-based product and the new value is the selected color.

1 27. The method of claim 26, further comprising generating a second preview image of the
2 image-based product having a border, wherein the color of the border is the color specified
3 by the border color product attribute.

1 28. The method of claim 1, wherein selecting a new value for the product attribute
2 includes selecting the new value at random.

1 29. The method of claim 28, wherein the selection of the new value is constrained based
2 on previous values of the product attribute.

1 30. The method of claim 1, wherein selecting a new value for the product attribute
2 includes selecting the new value at psuedo-random.

1 31. The method of claim 30, wherein the selection of the new value is constrained based
2 previous values of the product attribute.

1 32. The method of claim 1, wherein selecting a new value for the product attribute
2 includes selecting the new value from a predetermined ordering of values.

1 33. The method of claim 1, wherein the product attribute relates to which images are
2 incorporated in the image-based product, and the image-based product further incorporates at
3 least a portion of a second image.

1 34. The method of claim 33, further comprising:
2 receiving a plurality of images;
3 automatically identifying an image attribute of each of the received images; and

4 automatically selecting the first and second images from the received images based
5 on the image attributes of the received images.

1 35. The method of claim 34, wherein automatically identifying an image attribute of each
2 of the received images includes determining the orientation of each of the received images.

1 36. The method of claim 35, wherein the first and second images are selected from a
2 subset of the received images having a portrait orientation.

1 37. The method of claim 35, wherein the first and second images are selected from a
2 subset of the received images having a landscape orientation.

1 38. The method of claim 34, wherein the first and second images are selected from a
2 subset of the received images having similar image attributes.

1 39. The method of claim 33, wherein the image-based product is a diptych.

1 40. The method of claim 33, wherein the image-based product is a triptych.

1 41. The method of claim 1, further comprising fulfilling the order for the image-based
2 product.

1 42. The method of claim 1, wherein the image-based product is an image print.

1 43. The method of claim 1, wherein the image-based product is a framed image print.

1 44. The method of claim 1, further comprising storing state information about the first
2 image.

1 45. The method of claim 44, wherein the state information is updated each time a new
2 value for the product attribute is selected.

1 46. The method of claim 44, wherein the state information includes information about a
2 current state of the product attribute.

1 47. The method of claim 46, wherein the state information includes information about a
2 past state of the product attribute.

1 48. The method of claim 47, wherein the information about the past state of the product
2 attribute includes undo information for undoing the selection of the new value for the product
3 attribute.

1 49. The method of claim 48, further comprising:
2 receiving an undo command; and
3 undoing the selection of the new value for the product attribute based on the undo
4 information.

1 50. The method of claim 47, wherein the information about the past state of the product
2 attribute includes redo information for redoing the selection of the new value for the product
3 attribute.

1 51. The method of claim 50, further comprising:
2 receiving a redo command; and
3 redoing the selection of the new value for the product attribute based on the redo
4 information.

1 52. A server comprising:
2 a web front end that connects the server to a computer network;
3 a print lab, in communication with the web front end, that generates an image-based
4 product incorporating a first image;
5 wherein the server further includes software, tangibly stored on a computer-readable
6 medium, comprising instructions operable to cause the server to:
7 receive a first image via the computer network;
8 automatically identify an image attribute of the first image; and
9 automatically select a new value, for a product attribute of an image-based
10 product incorporating at least a portion of the first image, based on the image
11 attribute.

1 53. The server of claim 52, wherein the software further comprises instructions operable
2 to cause the server to:
3 generate a first preview image of the image-based product.

1 54. The system of claim 53, wherein the software further comprises instructions operable
2 to cause the server to
3 download the first preview image to a client computer.

1 55. The system of claim 54, wherein the software further comprises instructions operable
2 to cause the server to:
3 display the first preview image on the client computer.

1 56. The system of claim 52, wherein the software further comprises instructions operable
2 to cause the server to:
3 receive the first image from a client computer connected to the server using the
4 computer network.

1 57. The server of claim 52, wherein the computer network includes the Internet.

1 58. The server of claim 52, further comprising an image database, in communication with
2 the web front end, that stores the first image.

1 59. The server of claim 52, wherein the software further comprises instructions operable
2 to cause the server to:
3 receive a plurality of images.

1 60. The server of claim 59, wherein the software further includes instructions operable to
2 cause the server to receive a selection of the first image from the plurality of images.

1 61. The server of claim 60, wherein the selection is received from a client computer
2 connected to the computer network.

1 62. The server of claim 59, wherein the software further includes instructions operable to
2 cause the server to receive a selection of the first image from the plurality of images.

1 63. The server of claim 52, wherein the instructions operable to cause the server to
2 automatically identify an image attribute of the first image include instructions operable to
3 cause the server to:
4 analyze the first image.

1 64. The server of claim 63, wherein the new value for the product attribute is
2 automatically selected based on the analysis of the first image.

1 65. The server of claim 63, wherein the instructions operable to cause the server to
2 analyze the first image include instructions operable to cause the server to:
3 generate a set of representative colors from the first image.

1 66. The server of claim 65, wherein the instructions operable to cause the server to
2 generate the set of representative colors include instructions operable to cause the server to:
3 generate a color map for the first image.

1 67. The server of claim 66, wherein the instructions operable to cause the server to
2 generate a color map for the first image include instructions operable to cause the server to:
3 perform the median cut algorithm on the first image.

1 68. The server of claim 64, wherein the instructions operable to cause the server to
2 automatically select a new value for a product attribute of the image-based product based on
3 the image attribute include instructions operable to cause the server to:
4 select a color as a function of at least one of the representative colors.

1 69. The server of claim 68, wherein the instructions operable to cause the server to select
2 a color as a function of at least one of the representative colors include instructions operable
3 to cause the server to:
4 select a color that matches at least one of the representative colors.

1 70. The server of claim 69, wherein the instructions operable to cause the server to select
2 the color that matches at least one of the representative colors include instructions operable to
3 cause the server to:
4 selecting a color that complements at least one of the representative colors.

1 71. The server of claim 68, wherein the instructions operable to cause the server to select
2 the color as a function of at least one of the representative colors include instructions
3 operable to cause the server to:
4 select the color from the set of representative colors.

1 72. The server of claim 71, wherein the instructions operable to select the color from the
2 set of representative colors include instructions operable to cause the server to select the most
3 popular color.

1 73. The server of claim 71, wherein the instructions operable to select the color from the
2 set of representative colors include instructions operable to cause the server to select the
3 color at random from the set of representative colors.

1 74. The server of claim 68, wherein the product attribute is a border color product
2 attribute of the image-based product and the new value is the selected color.

1 75. The server of claim 74, wherein the software further includes instructions operable to
2 cause the server to generate a second preview image of the image-based product having a
3 border, wherein the color of the border is the color specified by the border color product
4 attribute.

1 76. The method of claim 52, wherein the instructions operable to cause the server to
2 automatically select a new value for a product attribute of the image-based product based on
3 the image attribute include instructions operable to cause the server to:
4 select a new value for the product attribute includes selecting the new value at

5 ~~random.~~

1 77. The system of claim 76, wherein the selection of the new value is constrained based
2 on previous values of the product attribute.

1 78. The system of claim 52, wherein the instructions operable to cause the server to
2 automatically select a new value for a product attribute of the image-based product based on
3 the image attribute include instructions operable to cause the server to:
4 selecting a new value for the product attribute includes selecting the new value at
5 psuedo-random.

1 79. The system of claim 78, wherein the selection of the new value is constrained based
2 on previous values of the product attribute.

1 80. The system of claim 52, wherein the instructions operable to cause the server to
2 automatically select a new value for a product attribute of the image-based product based on
3 the image attribute include instructions operable to cause the server to:
4 select a new value for the product attribute includes selecting the new value from a
5 predetermined ordering of values.

1 81. The server of claim 52, wherein the product attribute relates to which images are
2 incorporated in the image-based product, and the image-based product incorporates at least a
3 portion of a second image.

1 82. The server of claim 81, wherein the software further includes instructions operable to
2 cause the server to:
3 receive a plurality of images;
4 automatically identify an image attribute of each of the received images; and
5 automatically select the first and second images from the received images based on
6 the image attributes of the received images.

1 83. The server of claim 82, wherein the instructions operable to cause the server to
2 automatically identify an image attribute of each of the received images include instructions
3 operable to cause the server to determine the orientation of each of the plurality of images.

1 84. The server of claim 83, wherein the first and second images are selected from the
2 subset of images having a portrait orientation.

1 85. The server of claim 83, wherein the first and second images are selected from the
2 subset of images having a landscape orientation.

1 86. The server of claim 81, wherein the image-based product is a diptych.

1 87. The server of claim 81, wherein the image-based product is a triptych.

1 88. The server of claim 52, wherein the software further includes instructions operable to
2 cause the server to receive an order for the image-based product.

1 89. The server of claim 88, wherein the software further includes instructions operable to
2 cause the server to fulfill the order for the image-based product.

1 90. The server of claim 52, wherein the image-based product is an image print.

1 91. The server of claim 52, wherein the image-based product is a framed image print.

1 92. The server of claim 52, wherein the software further comprises instructions operable
2 to cause the server to store state information about the first image.

1 93. The server of claim 92, wherein the software further comprises instructions operable
2 to cause the server to update state information each time a new value for the product attribute
3 is selected.

1 94. The server of claim 92, wherein the state information includes information about a
2 current state of the product attribute.

1 95. The server of claim 92, wherein the state information includes information about a
2 past state of the product attribute.

1 96. The server of claim 95, wherein the information about the past state of the product
2 attribute includes undo information for undoing the selection of the new value for the product
3 attribute.

1 97. The server of claim 96, wherein the software further comprises instructions operable
2 to cause the server to:
3 receive an undo command; and
4 undo the selection of the new value for the product attribute based on the undo
5 information.

1 98. The server of claim 95, wherein the information about the past state of the product
2 attribute includes redo information for redoing the selection of the new value for the product
3 attribute.

1 99. The server of claim 98, wherein the software further comprises instructions operable
2 to cause the server to:
3 receive a redo command; and
4 redo the selection of the new value for the product attribute based on the redo
5 information.

1 100. A method for providing a user on a client computer an interface for changing one or
2 more product attributes of an image-based product that incorporates at least a portion of a
3 first image, the client computer being in communication with a server and having a display
4 and a pointing device operatively coupled to a cursor displayed on the display, the method
5 comprising:
6 displaying a border width control that, when actuated, supplies a new border size
7 value to the server so that the server can change a border product attribute of the image-based
8 product to the new border size value; and
9 displaying a preview image of the image-based product.

1 101. The method of claim 100, wherein the border width control is a button associated
2 with a minimum border size.

1 102. The method of claim 100, wherein the border width control is part of web page that is
2 downloaded by a browser executing on the client computer.

1 103. The method of claim 100, further comprising:
2 displaying a print size control that, when actuated, supplies a new print size value to
3 the server so that the server can change a print size product attribute of the image-based
4 product to the new print size value.

1 104. The method of claim 103, wherein the print size control is a selection box having a
2 plurality of print size selections a user can select.

1 105. The method of claim 103, wherein the print size control is part of web page that is
2 downloaded by a browser executing on the client computer.

1 106. A method for providing a user on a client computer an interface for changing one or
2 more product attributes of an image-based product that incorporates at least a portion of a
3 first image, the client computer being in communication with a server and having a display
4 and a pointing device operatively coupled to a cursor displayed on the display, the method
5 comprising:

6 displaying an image selection control that, when actuated, supplies an image selection
7 to the server, the image selection identifying an image;

8 displaying a text entry control that, when actuated, supplies text to the server; and

9 displaying a text position selection control including a plurality of versions of the
10 image, each version of the image including at least a portion of the text located in a
11 different text position on the image, wherein the text position selection control, when
12 actuated, supplies a text position selection to the server, the text position selection
13 corresponding to one of the text positions.

1 107. The method of claim 106, wherein the image selection control is part of web page that
2 is downloaded by a browser executing on the client computer and includes a plurality of
3 thumbnail images, wherein the user can actuate the image selection control by clicking on a
4 thumbnail image.

1 108. The method of claim 106, wherein the text entry control is a text entry field in which
2 a user can enter text.

1 109. The method of claim 106, wherein the text entry control is part of a web page that is
2 downloaded by a browser executing on the client computer.

1 110. The method of claim 106, wherein the text position selection control is part of a web
2 page that is downloaded by a browser executing on the client computer.

1 111. The method of claim 106, wherein a user can actuate the text position selection
2 control by clicking on one of the versions of the image.